# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/065,817 | 11/22/2002 | Anthony Chao | 36287.03900 | 9643 |

27171      7590      12/08/2005

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| EXAMINER |
|---|
| PRIETO, BEATRIZ |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2142 | |

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
| --- | --- | --- |
| | 10/065,817 | CHAO ET AL. |
| **Office Action Summary** | Examiner | Art Unit | |
| | Prieto B. | 2142 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *THREE* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on *11/22/02*.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 November 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## *DETAILED ACTION*

1.      This communication is in response to Application No. 10/065,817 filed 11/22/02, claims 1-14

have been examined.

### *Claim Rejection under 102*

2.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis

for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States
> before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled
> the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the
> applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA)

and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply

when the reference is a U.S. patent resulting directly or indirectly from an international application filed

before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C.

102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3.      Claims 1-14 are rejected under 35 USC 102(e) as being anticipated by Thiyagaranjan et. al. (US

2004/0054854) (Thiyagaranjan hereafter)

Regarding claim 1, Thiyagaranjan

        creating a cache storing data accessed from a database [claim 9];

        performing a refresh of the data cache from the database [0043];

        identifying change in the cache [0054];

        responsive to the change in the cache, sending a message to a computer [0054 or 0047-49]; and

        responsive to the message, automatically accessing the changed data [0054-0055] including

requesting the changed data [047, 0115, 042].

Regarding claims 2-3, responsive to a request from the client to the server, sending a set of data from the

data cache to the client over an established connection responsive to a request from the client to the server

[Thiyagaranjan: 0011], and wherein the connection uses HTTP protocol [Thiyagaranjan: 046].

Regarding claims 4-5 and 7, establishing a connection between the client and a server; and sending the message to the client from the server using the connection, wherein the connection uses a protocol [Thiyagaranjan: 0046] and wherein the message has at least two states, one state indicating no change in the data cache, and the other state indicating change in the data cache [Thiyagaranjan: 0015]

Regarding claim 6, establishing a first connection between the client and a server [Thiyagaranjan; Fig. 2-3];

establishing a second connection between the client and the server [Thiyagaranjan: Fig. 2-3, 0015];

responsive to a request from the client to the server, sending a set of data from the data cache to the client over the first connection [Thiyagaranjan 0011];

sending the message to the client from the server using the second connection [Thiyagaranjan: Fig. 2, 0013, 0015]; and

responsive to the message, automatically sending the request for the changed data from the client to the server using the first connection [Thiyagaranjan: 042, 047, 015]

Regarding claim 8, wherein requesting the changed date is responsive to the message state indicating change in the data cache [Thiyagaranjan: 0054]

Regarding claim 9, wherein the message is periodic [Thiyagaranjan; Fig. 5a-b].

Regarding claim 10, wherein the message is aperiodic [Thiyagaranjan: 047].

Regarding claim 11, creating a data cache in a RAM cache of an application server as a subset of a larger database [Thiyagaranjan: claim 9];

establishing an data connection between the client and the application server over a network [Thiyagaranjan: Fig. 2-3, 006];

establishing a connection between the client and the application server [Thiyagaranjan: Fig. 2-3;

responsive to a resource request from the client, sending an file via the connection to the client, the file reflecting data cached at the time of said request, caching requested resources for subsequent requests [0011], requested resources including web resources [0050]; and after cached, performing a periodic refresh of the data cache from the larger database [0054].

Regarding claim 12, this computer executable software code transmitted as an information signal, the code for updating information on a client computer, the code corresponding to the functions associated to the method discussed on claim 1, same rationale of rejection is applicable.

Regarding claim 13, this computer readable medium having computer executable code stored thereon, the code for updating information on a client computer, the code corresponding to the functions associated with the method discussed on claim 1, same rationale of rejection is applicable

Regarding claim 14, this programmed computer claim for updating information on a client computer, having the corresponding memory, processor and the code for performing the method discussed on claim 1, same rationale of rejection is applicable.

## *Citation of Pertinent Art:*

4.      The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Copies of Non-Patent Literature documents cited will be provided as set forth in MPEP§ 707.05(a):

(US 20020138551)

Erickson teaches a distributed cache for state transfer operations, including using a TCP/IP connection for updating caches.

Scalable Web Cache of Frequently Updated Objects using a reliable multicast, Li, D. et. al., USENIX Symposium on Internet Technologies and Systems, 1999.

Li et. al. discusses sending update notifications using a reliable internet based protocol, e.g. TCP-based invalidation protocol for maintaining a strong cache consistency can be maintained with little or no extra cost over the current weak consistency approaches.

(US 6,598,094)

Wollrath discloses determining status of remote objects in a distributed system, including identifying the status of an object based on a ping, a server in response returning a response including in indicating no change is associated with the object and a response including the object has changed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see http://pair-direct.uspto.gov or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
                Commissioner of Patents and Trademarks
                P.O. Box 1450
                Alexandria, VA 22313-1450

Hand carried or delivered to:
                Customer Service Window located at the Randolph Bldg.
                401 Dulany St.
                Alexandria, VA 22314

Faxed to the Central Fax Office:
                (571) 273-8300 (New Central Fax No.)

      Or Telephone:

                (571) 272-2100 for TC 2100 Customer Service Office.

B. Prieto
Primary Examiner
TC 2100
December 4, 2005

BEATRIZ PRIETO
PRIMARY EXAMINER